UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,271	01/22/2004	Michael Chilton Sheasby	011972-0004	2583

20559 7590 10/18/2007

ROBIC
CENTRE CDP CAPITAL
1001, VICTORIA SQUARE - BLOC E - 8TH FLOOR
MONTREAL, QC H2Z 2B7
CANADA

EXAMINER	
AMIN, JWALANT B	
ART UNIT	**PAPER NUMBER**
2628	

MAIL DATE	DELIVERY MODE
10/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/761,271	SHEASBY ET AL.	
	Examiner	Art Unit	
	Jwalant Amin	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

2. Regarding claims 1 and 13, the applicant argues Cecco does not teach "... a grid extending in multiple directions" and "multiple splits in a single step" (see last paragraph of pg. 10 of applicant's remarks).

The examiner interprets that Cecco in view of Farrah teaches a grid extending in multiple directions (Farrah: figs. 21A-21C). See rejection of claim 1 below for details.

3. Regarding claims 1 and 13, the applicant argues Cecco does not allow "multiple splits in a single step" (see last paragraph of pg. 10 of applicant's remarks).

However, the examiner interprets that the claim language that reads on this limitation "continually performing the following steps until the interactive segmenting mode remains". This limitation does not require multiple splits in a single step as the user could exit the interactive mode after only one pass during which the original region is divided into two regions. This is exactly what Cecco teaches.

4. Regarding claims 1 and 13, the applicant further argues that Cecco does not suggest "the panes of the segmenting are split into multiple subregions in a single step" (see pg. 11 second paragraph of applicant's remarks).

However, the examiner interprets that Cecco teaches to the process of creation of new pane or pane splitting (figs. 4A-4B, col. 2 lines 50-67, col. 3 lines 1-13, col. 4 lines 46-67, col. 5 lines 1-67, col. 6 lines 1-19; the original pane 6 is divided into two

new panes 6 and 20; the new pane 6 is different than the original pane 6; it should be noted that the two new panes correspond to multiple subregions). See rejection of claim 1 below for details.

5. Regarding claims 9 and 21, the applicant argues that Cecco and Farrah do not teach "... the user further receives interactive visual feedback via an overlaid grid display indicating the number of rows and/or columns that result from this interaction with the input device" (see pg. 11 last three lines of applicant's remarks).

However, the examiner interprets that although Cecco does not explicitly teach that the above limitation, Farrah teaches a graphical user interface (interactive visual feedback) to generate grid that overlays the area (region) of an electronic document (figs. 21A-B, [0225-0226]; a user selects the number of horizontal and vertical sub-divisions using selection buttons; the numbers of horizontal and vertical sub-divisions correspond to the number of rows/columns). There fore, it would have been obvious to one of ordinary skill in the art at the time of present invention to generate overlaid grid display to indicate the sub-division of an area as taught by Farrah and use such graphical user interface into the method of Cecco because the grid lines allow the area to be sub-divided into a number of regions which can be selected by a user of GUI in the generation of their artwork ([0225] last four lines).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner interprets the limitation "continually computing a number of equidistant horizontal and vertical splits to apply to the initial region as a function of the input device to the initial position" is best described by figures 14 and 15 and pages 7-10 of the specification. However, the examiner fails to find any description support "continually computing a number of equidistant horizontal and vertical splits". The examiner requests the applicant to show support for this limitation in the original disclosure. It should be noted that for the purpose of prior art rejection, this limitation will be considered.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-10, 12-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cecco et al. (US 6310631; hereinafter Cecco), in view of Farrah (US 2004/0030997), and further in view of Kishi (US 5903229).

10. Regarding claims 1 and 13, Cecco (fig. 2, fig. 3, figs. 4A-B, col. 2 lines 50-67, col. 3 lines 1-13, col. 4 lines 46-67, col. 5 lines 1-67, col. 6 lines 1-19, col. 11 lines 33-41) teaches a method and a computer readable medium (data processing system usable medium) having computer instructions (program/program code) stored thereon for implementing the method for segmenting (dividing) an initial region (original pane) on a display (computer display screen) into a set of newly-created independent regions (newly created panes 6 and 20; it should be noted that the newly created pane 6 is different in dimension to the original pane 6) using an input device (user control device such as mouse), the initial region comprising a bounded area or volume of the display (Fig. 2 shows panes 6, 7 and 8 are composed on bounded area), the display including one or more regions within a larger area or volume (Fig. 2 shows a display screen with a plurality of panes; the display screen is a larger area containing the smaller panes), the set of newly-created independent regions arranged into a matrix of regions, wherein the regions in aggregate equal the dimensions of the initial region (newly created panes 6 and 20; it should be noted that the newly created pane 6 is different in dimension to the original pane 6; the dimension of the newly created panes 6 and 20 equals to the dimension of the original pane 6), the input device being adapted to convert a user input (pressing, holding and releasing) into a two or three-dimensional position (new pane), the method comprising entering an interactive segmenting mode (interactive step of holding the user control while the cursor is positioned over a grab handle), detecting the initial position of the input device at the time of entering the interactive segmenting mode (the cursor changes when it is positioned over the grab handle; this position is

tracked; when the cursor is moved by holding the grab handle, the rubber band rectangle changes size accordingly and tracks to the current cursor position), continually performing the following steps until the interactive segmenting mode remains (it is interpreted that the user could exit the interactive mode after only one pass during which the original region is divided into two regions); monitoring ongoing movements of the input device (as the user continues to move the cursor while holding down a mouse button, the rubber band rectangle changes size accordingly and tracks to the current mouse pointer position); indicating positions of the pending splits to a user (figs. 4A-B, after the border of the adjustable rectangular shape has been located to the desired new location), leaving the interactive segmenting mode (releasing the user control), replacing the initial region with the set of newly created independent regions at the positions previously indicated to the user (figs 4A-B; after the border of the adjustable rectangular shape has been located to the desired new location, a new pane 20 is added to the display which is of the shape and configuration of the resultant rubber band where the border 18 was last positioned; thus the original pane 6 is modified and changed into a newly created pane 20 and the modified pane 6).

Although Cecco teaches the limitations as stated above, Cecco does not explicitly teach the newly created regions are arranged into a matrix of equally sized regions, and continually computing a number of equidistant horizontal and vertical splits to apply to the initial regions as a function of the distance of the input device to the initial position. However, Farrah (figs. 21a-b, [0225-0227]) teaches to split the region 101 into a matrix of equally sized sub-regions 103a, 103b, 103c and 103d. Farrah further

teaches to compute the number of equidistant horizontal and vertical splits to apply to the initial region (figs. 21a-b show that the region 101 is divided into a number of equally sized and equidistant horizontal and vertical regions based on the numbers selected for the rows and columns by the user). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to divide the region into a number of equally sized and equidistant horizontal and vertical regions as taught by Farrah and apply it into the method of Cecco because such regions are commonly used in computer programs which are used to generate artworks, drawings and flow charts ([0006]).

Although Cecco and Farrah teach the limitations as stated above, they do not explicitly teach computing a number of equidistant horizontal and vertical splits to apply to the initial regions as a function of the distance of the input device to the initial position. However, Kishi teaches that a user can move the pointer by moving the mouse on a mouse pad in order to drag a scroll box up/down along a scroll bar to increase/decrease the value (col. 1 lines 38-45; it should be noted here that the value increases or decreases as a function of the distance of the input device to the initial position). Therefore, it would have been obvious to one of ordinary skill in art at the time of present invention to use the mouse cursor to drag the scroll bar to increase the value as taught by Kishi, and replace the selection buttons of Farrah with the scroll bar of Kishi because using the scroll bar to increase/decrease the value to set the desired values, requires the user to perform less work of clicking the selection buttons in case of a very large number.

11. Regarding claim 2 and 14, Cecco (fig. 2, fig. 3, figs. 4A-B, col. 2 lines 66-67, col. 3 lines 1-13, col. 4 lines 55-67, col. 5 lines 1-2) teaches the display further associates a visual control (divide grab handles/grab handles) with each region which enables interactive splitting mode (divide function activated via a click and drag action), said control to be rendered visible either upon selection of the region, upon entry into the region by a pointing device, or at all times (divide grab handles are displayed at all the times as shown in figs. 2, 3 and 4A-B).

12. Regarding claims 3 and 15, Cecco teaches the step of entering and leaving the interactive segmenting mode comprises pressing a button on a computer mouse over a visual control associated with one of the selected regions and subsequently releasing the button (col. 3 lines 4-11, col. 5 lines 33-67, col. 6 lines 1-6).

13. Regarding claims 4 and 16, Cecco teaches the step of entering and leaving the interactive segmenting mode comprises a pressing a key on the keyboard and subsequently releasing it (col. 3 lines 4-11, col. 4 lines 2-7, col. 5 lines 45-52; keyboard is a type of user control which could be used to press and hold the grab handle and then later release it).

14. Regarding claims 5 and 17, Cecco teaches the segmentation of the region is computed by independently sectioning the region into rows and/or columns (pane 6 as shown in fig. 4A is divided into two columns composing panes 6 and 20 as shown in fig. 4B) as a function of the distance from the current pointer position to the position of the pointer as it was when the user entered segmenting mode (fig. 3, figs. 4A-B, figs. 5A-B, col. 5 lines 46-67, col. 6 lines 1-27; when the user presses and holds the grab handle 15

of fig. 3, this position of grab handle 15 is the original position of the pointer; the current pointer position corresponds to the desired new location of the rectangular adjustable shape 19; if cursor is not moved after selecting the grab handles, i.e. no distance is covered, there would be no division of the current pane and no new pane is created; thus dividing the original pane into new pane depends on the distance moved by the pointer).

15. Regarding claims 6 and 18, Cecco (figs. 3, 4A-B and 5A-B, col. 5 lines 33-67, col. 6 lines 1-27) teaches the segmentation of the region is computer by independently sectioning the region into rows and/or columns (pane 6 as shown in fig. 4A is divided into two columns composing panes 6 and 20 as shown in fig. 4B) as a function of the number of times (one time as illustrated in figs. 3 and 4A-B) the user has pressed keys on the keyboard (as shown in figs. 4A-B, the user presses and holds the user control once (keyboard) to select the grab handles and then later releases it, and thus dividing the original pane into two panes) indicating that horizontal or vertical segmentation should be increased or decreased (figs. 4A-B indicates horizontal segmentation is increased and figs. 5A-B indicates vertical segmentation is increased).

16. Regarding claims 7 and 19, Cecco teaches the segmentation is applied to the region when the segmenting mode is exited (when the user releases the key the original pane is divided and a new pane is created as shown in figs. 4A-B, col. 6 lines 1-27), and the user is further able to abort segmentation (cancel the insert pane operation), the method for aborting comprising pressing a key (ESC key, col. 6 lines 45-48).

17. Regarding claims 8 and 20, Cecco (figs. 4A-B, col. 5 lines 33-67, col. 6 lines 1-6) teaches the user further receives interactive visual feedback via an overlaid set of lines (rectangular adjustable shape/rubber band rectangle) on the region indicating the actual location of row and/or column divisions (as shown in figs. 4A-B, the rectangular adjustable shape indicates where the new pane will appear after dividing the original pane 6) that result from his interaction with the input device (the user operates and moves the rectangular adjustable shape to a desired new location by dragging the mouse).

18. Regarding claims 9 and 21, Cecco discloses all of the claimed limitations as stated above, except that he does not explicitly teach that the user further receives interactive visual feedback via an overlaid grid display indicating the number of rows and/or columns that result from his interaction with the input device. However, Farrah teaches a graphical user interface (interactive visual feedback) to generate grid that overlays the area (region) of an electronic document (figs. 21A-B, [0225-0226]; a user selects the number of horizontal and vertical sub-divisions using selection buttons; the numbers of horizontal and vertical sub-divisions correspond to the number of rows/columns). There fore, it would have been obvious to one of ordinary skill in the art at the time of present invention to generate overlaid grid display to indicate the sub-division of an area as taught by Farrah and use such graphical user interface into the method of Cecco because the grid lines allow the area to be sub-divided into a number of regions which can be selected by a user of GUI in the generation of their artwork ([0225] last four lines).

19. Regarding claims 10 and 22, Cecco teaches the segmentation of the original region(s) (pane 6 in figs. 5A-C) replaces those region(s) with new, independent regions (newly created pane 21) according to the segmentation selected by the user (col. 6 lines 19-27).

20. Regarding claims 12 and 24, Cecco teaches the segmentation of the original region(s) (pane 6 in figs. 4A-B) is stored as a collection of subregions (the changed and resized pane 6 and the newly created pane 20) of the original region, which continues to exist within the system (col. 6 lines 6-9; pane 6 continues to exist in the system as shown in fig. 4B).

21. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cecco, and further in view of Moore et al. (US 6,874,128 B1; hereinafter referred to as Moore).

Regarding claims 11 and 23, Cecco discloses all of the claimed limitations as stated above, except that he does not explicitly teach that the material contained within the original region(s) are retained within one of the newly-created regions. However, Moore teaches to place the content (material) of a content GUI window (original region) into newly created top pane (newly created region) of the splitter window (col. 6 lines 16-24. Therefore, it would have been obvious to one of ordinary skill in the art at the time of present invention to retain the content of the original region into the newly created region as taught by Moore and use it into the method of Cecco because if the content of

the original window is not retained into one of the newly created panes of the splitter window then that content will be lost.

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jwalant Amin whose telephone number is 571-272-2455. The examiner can normally be reached on 9:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*** 10|13|07

MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600